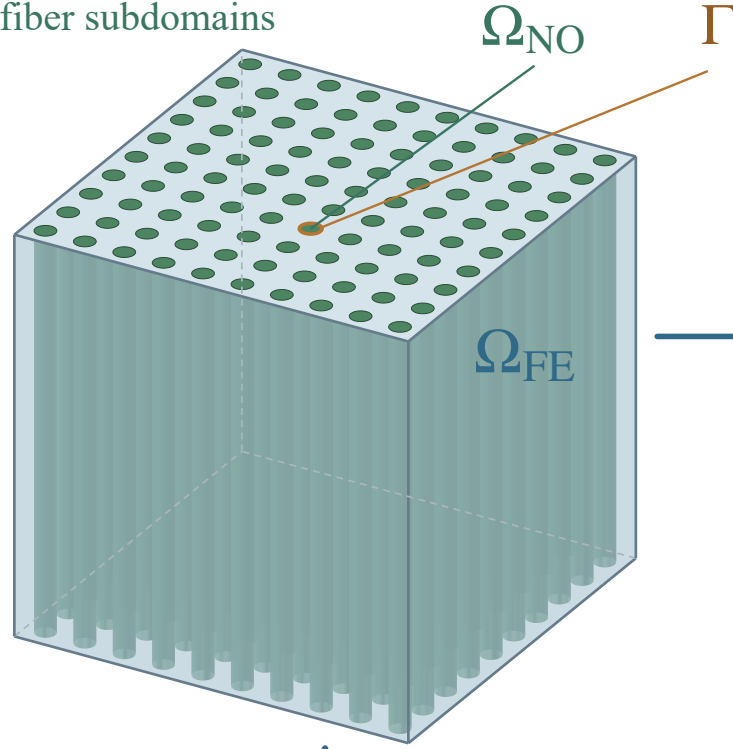


Non-Overlapping Domain Decomposition

100 fiber subdomains

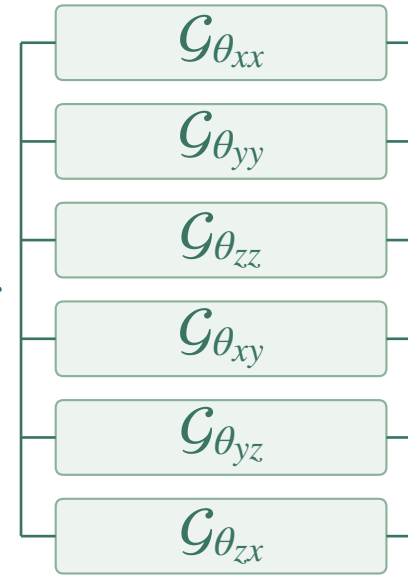


Interface displacement

$$\mathbf{u}_{\Gamma}^{(k)}$$

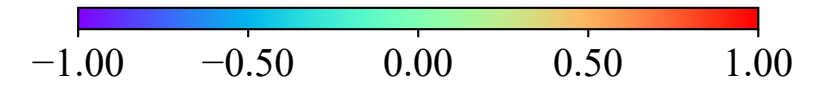
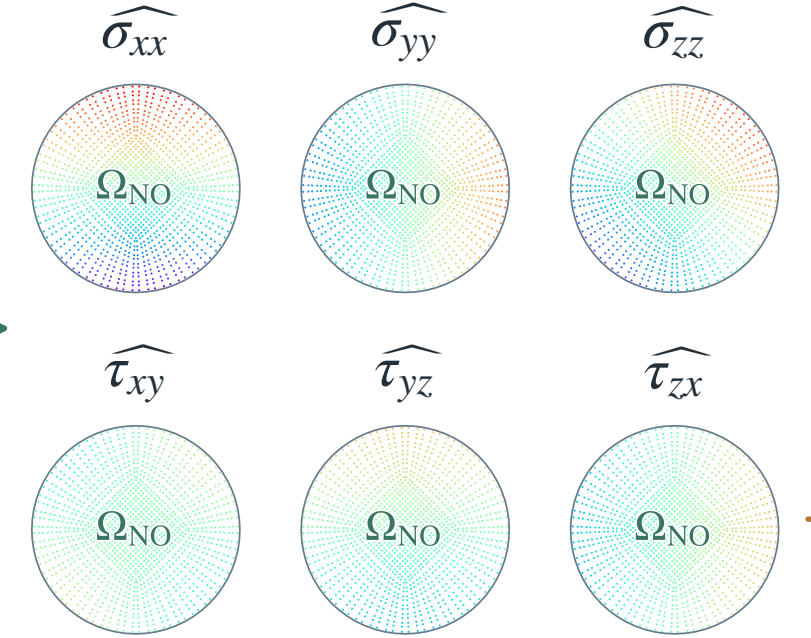
Frozen Transolvers

Six independent models



Shared across all fibers

Gauss-point stresses



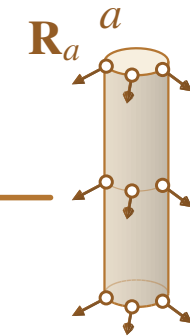
Interface reaction force

$$-\mathbf{R}_{\Gamma}^{(k+1)}$$

Apply interface reaction

IQN-ILS
Accelerator

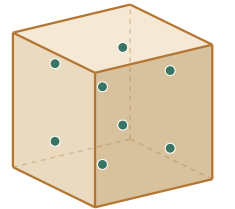
$$\widetilde{\mathbf{R}}_{\Gamma}^{(k)}$$



Interface nodal forces

Assemble

$$\mathbf{R}_a = \sum_{e \ni a} \sum_q \hat{\sigma}_{eq} (\nabla N_a)_{eq} J_{eq} w_q$$



Gauss integration